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shall be omitted from any new merchant mariner's document issued.

§12.25-30 Student observers.

Students in technical schools who are enrolled in courses in marine management and ship operations who present a letter or other documentary evidence that they are so enrolled shall be issued a merchant mariner's document as *student observers—any department* and may be signed on ships as such. Students holding these documents or certificates will not take the place of any of the crew, or fill any of the regular ratings.

§12.25-35 Apprentice engineers.

- (a) Persons enrolled in an apprentice engineer training program approved by the Director, National Maritime Center, and who present a letter or other documentary evidence that they are so enrolled may be issued a merchant mariner's document as apprentice engineer and may be signed on ships as such. The endorsement apprentice engineer may be in addition to other endorsements. However, this endorsement of apprentice engineer does not authorize the holder to fill any of the regular ratings.
- (b) Persons holding merchant mariner's documents with the endorsement apprentice engineer shall be deemed to be seamen under the provisions of title 53 of the Revised Statutes and the regulations in this subchapter.

[CGFR 66-69, 31 FR 15669, Dec. 13, 1966, as amended by CGD 95-072, 60 FR 50460, Sept. 29, 1995]

§12.25-40 Apprentice mate.

A person enrolled in an apprentice mate training program approved by the Director, National Maritime Center who presents a letter or other documentary evidence that he is so enrolled may be issued a merchant mariner's document as apprentice mate and may be signed on ships as apprentice mate. The endorsement apprentice mate may be in addition to other endorsements. However, this endorsement as apprentice mate may be in addition to other endorsements.

tice mate does not authorize the holder to fill any of the regular ratings.

[CGD 74-226, 40 FR 33976, Aug. 13, 1975, as amended by CGD 95-072, 60 FR 50460, Sept. 29, 1995]

PART 13—CERTIFICATION OF TANKERMEN

Subpart A—General

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course.

Authority: 46 U.S.C. 3703, 7317, 8105, 8703, 9102; 49 CFR 1.46.

SOURCE: CGD 79-116, 60 FR 17142, Apr. 4, 1995, unless otherwise noted.

Subpart A—General

§13.101 Purpose.

This part describes the various tankerman endorsements issued by the Coast Guard and prescribes the requirements for obtaining an endorsement as a "Tankerman-PIC," "Tankerman-PIC (Barge)," "Tankerman-Assistant," or "Tankerman-Engineer" to a merchant mariner's document.

§13.103 Definitions.

As used in this part:

Cargo engineer means a licensed person on a dangerous-liquid tankship or a liquefied-gas tankship whose primary responsibility is maintaining the cargo system and cargo-handling equipment.

Competent person means a person designated as such in accordance with 29 CFR 1915.7.

Dangerous liquid means a liquid listed in 46 CFR 153.40 that is not a liquefied gas as defined in this part. Liquid cargoes in bulk listed in 46 CFR Part 153, Table 2, are not dangerous-liquid cargoes when carried by non-oceangoing barges.

DL means dangerous liquid.

IMO means the International Maritime Organization.

Liquefied gas means a cargo that has a vapor pressure of 172 kPa (25 psia) or more at 37.8 C (100 F).

LG means liquefied gas.

Liquid cargo in bulk means a liquid or liquefied gas listed in 46 CFR 153.40 and carried as a liquid cargo or liquid-cargo residue in integral, fixed, or portable tanks.

Marine chemist means a person certificated by the National Fire Protection Association.

MMD means a merchant mariner's document issued by the Coast Guard.

Participation, when used with regard to the service on transfers required for tankerman by §13.120, 13.203, or 13.303, means either actual participation in the transfers or close observation of how the transfers are conducted and supervised.

PIC means a person in charge.

Restricted Tankerman endorsement means a valid tankerman endorsement to an MMD restricted to specific cargoes or groups of cargoes, specific vessels, specific facilities, specific employers, or the like.

Simulated transfer means a transfer practiced in a course meeting the requirements of §13.121 that uses simulation supplying part of the service on transfers required for tankerman by §13.203 or 13.303.

Tank barge means a non-self-propelled tank vessel.

Tank vessel means a vessel constructed or adapted to carry, or a vessel that carries, oil or hazardous material in bulk as cargo or cargo residue.

Tankerman-Assistant means a person holding a valid "Tankerman-Assistant" endorsement to his or her MMD.

Tankerman-Engineer means a person holding a valid "Tankerman-Engineer" endorsement to his or her MMD.

Tankerman-PIC means a person holding a valid "Tankerman-PIC" endorsement to his or her MMD.

Tankerman-PIC (Barge) means a person holding a valid "Tankerman-PIC (Barge)" endorsement to his or her MMD.

Tankship means any tank vessel constructed or adapted primarily to carry oil or hazardous material in bulk as

cargo or as cargo residue and propelled by power or sail.

Transfer means any movement of dangerous liquid or liquefied gas as cargo in bulk or as cargo residue to, from, or within a vessel by means of pumping, gravitation, or displacement. Section 13.127 describes what qualifies as participation in a creditable transfer

§13.105 Paperwork approval.

- (a) This section lists the control numbers assigned by the Office of Management and Budget (OMB) under the Paperwork Reduction Act of 1980 [Pub. L. 96-511] for the reporting and record-keeping requirements in this part.
- (b) OMB has assigned the following control numbers to the sections indicated:
- (1) OMB 2115-0514—46 CFR 13.113, 13.115, 13.117, 13.201, 13.203, 13.205, 13.301, 13.303, 13.305, 13.401, 13.403, 13.405, 13.501, 13.503, 13.505.
- (2) OMB 2115-0111—46 CFR 13.121, 13.207, 13.209, 13.307, 13.309, 13.407, 13.409, 13.507, 13.509.

§ 13.107 Tankerman endorsement: General.

- (a) If an applicant meets the requirements of subpart B of this part, the Officer in Charge, Marine Inspection (OCMI), at a Regional Examination Center (REC) may endorse his or her MMD as "Tankerman-PIC" with the appropriate cargo classification or classifications. A person holding this endorsement and meeting the other requirements of 33 CFR 155.710(a) may act as a PIC of transfers of liquid cargo in bulk on either tankships or tank barges.
- (b) If an applicant meets the requirements of Subpart C of this part, the OCMI may endorse his or her MMD as "Tankerman-PIC (Barge)" with the appropriate cargo classification or classifications. A person holding this endorsement and meeting the other requirements of 33 CFR 155.710(b) may act as a PIC of transfers of liquid cargo in bulk only on tank barges.
- (c) If an applicant meets the requirements of subpart D of this part, the OCMI may endorse his or her MMD as "Tankerman-Assistant" with the appropriate cargo classification or classi-

fications. No person holding this endorsement may act as a PIC of any transfer of liquid cargo in bulk unless he or she also holds an endorsement authorizing service as PIC. He or she may, however, perform duties relative to cargo and cargo-handling equipment assigned by the PIC of transfers of liquid cargo in bulk without being under the direct supervision of the PIC. When performing these duties, he or she shall maintain continuous two-way voice communications with the PIC.

- (d) If an applicant meets the requirements of subpart E of this part, the OCMI may endorse his or her MMD as ''Tankerman-Engineer.'' No person holding this endorsement may act as a PIC or "Tankerman-Assistant" of any transfer of liquid cargo in bulk unless he or she also holds an endorsement authorizing such service. A person holding this endorsement and acting in this capacity has the primary responsibility on tank vessels carrying dangerous liquids and liquefied gases for maintaining the cargo systems and equipment for transfer of liquids in bulk aboard and for bunkering. No person licensed under part 10 of this chapter may serve as a chief engineer, first assistant engineer, or cargo engineer aboard an inspected tankship when liquid cargo in bulk or cargo residue is carried unless he or she holds this endorsement.
- (e) If an applicant meets the requirements of §13.111 of this part, the OCMI may endorse his or her MMD as a "Tankerman-PIC" with a specific restriction or restrictions. A person holding this endorsement may act as Tankerman-PIC or Tankerman-PIC (Barge) for specific cargoes or groups of cargoes, specific vessels, specific facilities, specific employers, or the like.
- (f) A tankerman wishing to obtain an endorsement that he or she does not hold shall apply at an REC listed in §10.105 of this chapter. If he or she meets all requirements for the new endorsement, the REC may issue a new MMD including the endorsement.

§13.109 Tankerman endorsement: Authorized cargoes.

(a) Each tankerman endorsement described in §13.107 will expressly limit

the holder's service under it to transfers involving one or both of the following cargo classifications:

- (1) Dangerous liquid (DL).
- (2) Liquefied gas (LG).
- (b) No tankerman endorsement is necessary to transfer the liquid cargoes in bulk listed in Table 2 of Part 153 of this chapter when those cargoes are carried on barges not certified for ocean service.
- (c) A tankerman having qualified in one cargo classification and wishing to qualify in another shall apply at an REC listed in §10.105 of this chapter. If he or she meets all requirements for the other, the REC may issue a new MMD including the endorsement.

§13.111 Restricted endorsement.

- (a) An applicant may apply at an REC listed in 46 CFR 10.105 for a tankerman endorsement restricted to specific cargoes or groups of cargoes, specific vessels, specific facilities, specific employers, or the like. The OCMI will evaluate each application and may modify the applicable requirements for the endorsement, making allowance for special circumstances and for whichever restrictions the endorsement will state.
- (b) To qualify for a restricted "Tankerman-PIC" endorsement, an applicant shall meet §13.201, excluding paragraph (f).
- (c) To qualify for a restricted "Tankerman-PIC (Barge)" endorsement, an applicant shall meet §13.301, excluding paragraph (f).
- (d) To qualify for a restricted "Tankerman-PIC (Barge)" endorsement restricted to a tank-cleaning and gas-freeing facility, an applicant shall—
 - (1) Be at least 18 years old;
 - (2) Apply on a Coast Guard form;
- (3) Present evidence of passing a physical examination in accordance with §13.125;
- (4) Present evidence in the form of a letter on company letterhead from the operator of the facility stating that OSHA considers the applicant a "competent person" for the facility and that the applicant has the knowledge necessary to supervise tank-cleaning and gas-freeing; and

(5) Be capable of speaking and understanding, in English, all instructions needed to commence, conduct, and complete a transfer of cargo, and of reading the English found in the Declaration of Inspection, vessel response plans, and Cargo Information Cards.

(e) The restricted "Tankerman-PIC (Barge)" endorsement restricted to a tank-cleaning and gas-freeing facility is valid only while the applicant is employed by the operator of the facility that provided the letter of service required by paragraph (d)(4) of this section, and this and any other appropriate restrictions will appear in the endorsement.

§13.113 Tankerman certified under prior regulations.

- (a) A person who holds a license issued under part 10 of this chapter, and who as a PIC transferred liquid cargoes in bulk before March 31, 1996, may continue to serve as a "Tankerman-PIC" under the license until the first renewal of his or her MMD under 12.02–27 of this chapter that occurs after March 31, 1997, as follows:
- (1) A person holding a current license issued under part 10 of this chapter may act as a "Tankerman-PIC" if he or she can produce a letter on company letterhead from the owner, operator, master, or chief engineer of the vessel that proves his or her qualifying service as required by paragraph (d)(1)(iii) of this section.
- (2) A person that cannot produce a letter to prove his or her qualifying service may submit relevant evidence to an REC for evaluation. If the OCMI determines that the person does qualify under paragraph (a) of this section, the OCMI will issue a letter of acknowledgment as a substitute for a letter of service.
- (b) A person who holds a current "Tankerman" endorsement issued before March 31, 1996, may continue to serve as a Tankerman-PIC (Barge) until the first renewal of his or her MMD under §12.02–27 of this chapter that occurs after March 31, 1997. If a person with such an endorsement qualifies for a non-tankerman endorsement that requires a new MMD, he or she may bring the tankerman endorsement forward onto the new MMD.

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- (c) A person who served as PIC for the transfer of liquid cargoes in bulk listed in subchapter O but who did not require a tankerman endorsement, because they were non-flammable or noncombustible liquids, may act as a "Tankerman-PIC (Barge)" for those liquid cargoes until March 31, 2001, if he or she produces a letter—on company letterhead, from the owner or operator of a terminal or of a tank barge or from the owner, operator, or master of a tankship that proves his or her qualifying service as required by paragraph (e)(1)(iii) of this section.
- (d) A person that qualifies under paragraph (a) of this section by holding a current license may apply for a "Tankerman-PIC" endorsement under this subpart.
- (1) To qualify for a "Tankerman-PIC" endorsement, a licensed officer shall present—
- (i) Å certificate of completion from a course in shipboard firefighting approved by the Commandant and meeting the basic firefighting section of the IMO's Resolution A.437 (XI), "Training of Crews in Fire Fighting", or a certificate of completion from a firefighting course before March 31, 1996, that the OCMI finds in substantial compliance with that section:
- (ii) A certificate of completion from a liquid-cargo course in DL or LG approved by the Commandant, appropriate to the endorsement applied for, or a certificate of completion from a liquid-cargo course in DL or LG up to ten years before March 31, 1996, that the OCMI finds acceptable under \$\\$13.121(e) (1) and (2), appropriate to the endorsement applied for; and
 - (iii) Evidence of service as follows:
- (A) A letter on company letterhead from the owner, operator, master, or chief engineer of the vessel attesting that the applicant—
- (1) Acted as the PIC of the transfer of DL or LG, appropriate to the endorsement applied for, on tankships before March 31, 1996, and has so acted within five years of the date of application; or
- (2) Served at least 30 days as a master or mate on tankships certified to carry DL or LG, appropriate to the endorsement applied for before March 31, 1996, and has so acted within five years of the date of application; or

- (B) Certificates of Discharge proving at least 30 days of service as master or mate on tankships certified to carry DL or LG, appropriate to the endorsement applied for before March 31, 1996, with a discharge date within five years of the date of application.
- (2) To qualify for a restricted "Tankerman-PIC" endorsement, based on his or her cargo-handling experience for the grades handled, an applicant shall meet paragraphs (d)(1) (i) and (iii) of this section.
- (e) A person who qualifies under paragraph (b) of this section by holding a current "Tankerman" endorsement or under paragraph (c) of this section by having served as PIC for the transfer of liquid cargoes in bulk that are listed in subchapter O but that did not require a tankerman endorsement may apply for a "Tankerman-PIC (Barge)" endorsement under this subpart.
- (1) To qualify for a "Tankerman-PIC (Barge)" endorsement, an applicant shall present—
- (i) Evidence of training in firefighting in the form of—
- (A) A certificate of completion from a course in shipboard firefighting approved by the Commandant and meeting the basic firefighting section of the IMO's Resolution A.437 (XI), "Training of Crews in Fire Fighting", or a certificate of completion from such a course before March 31, 1996, that the OCMI finds in substantial compliance with that section:
- (B) A certificate of completion from a training course meeting §13.121 in tank-barge firefighting or a certificate of completion from a course in tankbarge firefighting before March 31, 1996, that the OCMI finds in substantial compliance with §13.121; or
- (C) A letter on company letterhead from the owner, operator, master, or chief engineer attesting that before March 31, 1996, the applicant received training in awareness of flammability hazards and in firefighting through a program, lecture, or seminar that included hands-on firefighting that the OCMI finds in substantial compliance with \$13,121.
- (ii) A certificate of completion from a liquid-cargo course in DL or LG approved by the Commandant, appropriate to the endorsement applied for,

or a certificate of completion from a liquid-cargo course in DL or LG up to ten years before March 31, 1996, that the OCMI determines substantially covers the material required by Table 13.121(f); and

(iii) Evidence of service on company letterhead from the owner, operator, master, or chief engineer of the vessel attesting that the applicant acted as the PIC of the transfer for DL or LG, appropriate to the endorsement applied for on tank vessels, before March 31, 1996, and has so acted within five years of the date of application.

(2) To qualify for a restricted "Tankerman-PIC (Barge)" endorse-

ment, based on his or her cargo-handling experience for the grades handled, an applicant shall meet all the requirements of paragraphs (e)(1) (i) and (iii) of this section.

- (f) Each person qualifying under this section shall obtain a tankerman endorsement at the first renewal of his or her MMD under §12.02-27 of this chapter that occurs after March 31, 1997.
- (g) The following table relates the experience and training to the endorsement for tankerman certified under prior regulations. The section numbers on the table refer to the specific requirements applicable.

TABLE 13.113.—TANKERMAN CERTIFIED UNDER PRIOR REGULATIONS

Before effective date served as—	Service after effective date but before permanent endorsement:	Requirements for permanent en- dorsement to an MMD:	Requirements for RESTRICTED endorsement to an MMD:
Licensed Officer	May serve as: §13.113(a) Tankerman-PIC.	Tankerman-PIC § 13.113(d)(1)	Tankerman-PIC § 13.113(d)(2).
	Limitations: NoneAllowed until: First renewal of MMD.	Service: Service letter from com- pany rep as PIC of DL or LG cargo transfer, or 30 days' serv- ice as master or mate on tank- ships carrying DL or LG	Service: Service letter from com- pany rep as PIC of DL or LG cargo transfer, or 30 days' serv- ice as master or mate on tank- ships carrying DL or LG.
	Service documentation: Service letter from company rep.	Courses: Liquid-cargo course in the appropriate cargo grade, & Firefighting.	Course: Firefighting course.
MMD with a Tankerman's en- dorsement.	May serve as: §13.113(b) Tankerman-PIC (Barge).	Tankerman-PIC (Barge) § 13.113(e)(1).	Tankerman-PIC (Barge) § 13.113(e)(2).
	Limitations: Grade of cargo on existing MMD. Until: First renewal of MMD Documentation: None	Service: Service letter from com- pany rep as Service letter PIC of DL or LG cargo transfer. Courses: Liquid-cargo course in the appropriate cargo grade, & Tank-barge firefichting.	Service: Service letter from com- pany rep as PIC of DL or LG cargo transfer. Course: Tank-barge firefighting.
PIC-Subchapter O Non-flammable and Non-combustible.	May serve as: §13.113(c) Tankerman-PIC (Barge).	Tankerman-PIC (Barge) § 13.113(e)(1).	Tankerman-PIC (Barge) § 13.113(e)(2).
	Limited to: Subchapter-O products previously transferred. Until: 5 years after effective date.	Service: Service letter from com- pany rep as PIC of DL or LG cargo transfer.	Service: Service letter from com- pany rep as PIC of DL or LG cargo transfer
	Documentation: Service letter from company rep as PIC.	Courses: Liquid-cargo course in the appropriate cargo Tankbarge firefighting.	Course: Tank-barge firefighting.

§13.115 Licensed engineer: Endorsement as Tankerman-Engineer based on service on tankships before March 31, 1996.

A licensed person with service as chief, first assistant, or cargo engineer on at least one tankship before March 31, 1996, may, at any time until the first renewal of his or her MMD under §12.02–27 of this chapter that occurs after March 31, 1997, apply for a

"Tankerman-Engineer" endorsement under this subpart if he or she presents either—

(a) A letter on company letterhead from the owner, operator, master, or chief engineer of the vessel attesting that the applicant served at least 30 days as chief, first assistant, or cargo engineer on tankships certified to carry DL or LG, appropriate to the endorsement applied for before March 31,

1996, and has so served within five years of the date of application; or

(b) Certificates of Discharge proving at least 30 days of service as chief, first assistant, or cargo engineer on tankships certified to carry DL or LG, appropriate to the endorsement applied for before March 31, 1996, with a discharge date within five years of the date of application.

§13.117 Any person: Endorsement as Tankerman-Assistant based on unlicensed deck service before March 31, 1996.

A person with unlicensed deck service on tankships before March 31, 1996, may, at any time until the first renewal of his or her MMD under §12.02–27 of this chapter that occurs after March 31, 1997, apply for a "Tankerman-Assistant" endorsement under this subpart if the applicant presents either—

(a) A letter on company letterhead from the owner, operator, or master of the vessel attesting that the applicant served at least 30 days of deck service on tankships certified to carry DL or LG, appropriate to the endorsement applied for before March 31, 1996, and has so served within five years of the date of application; or

(b) Certificates of Discharge proving at least 30 days of deck service on tankships certified to carry DL or LG, appropriate to the endorsement applied for before March 31, 1996, with a discharge date within five years of the date of application.

§13.119 Expiration of endorsement.

An endorsement as tankerman is valid for the duration of the MMD.

§13.120 Renewal of endorsement.

An applicant wishing to renew a tankerman's endorsement shall meet the requirements of §12.02–27 of this chapter for renewing an MMD and provide evidence of participation in at least two transfers during the past five years in accordance with §13.127(b) or of completion of an approved course.

§ 13.121 Courses for training tankerman.

(a) This section prescribes the requirements, beyond those in §§ 10.203

and 10.303 of this chapter, applicable to schools offering courses required for a tankerman endorsement and courses that are a substitute for experience with transfers of liquid cargo in bulk required for the endorsement.

- (b) Upon satisfactory completion of an approved course, each student shall receive a certificate, signed by the head of the school offering the course or by a designated representative, indicating the title of the course, the duration, and, if appropriate, credit allowed towards meeting the transfer requirements of this part.
- (c) A course that uses simulated transfers to train students in loading and discharging tank vessels may replace a specific number of the transfers required for a "Tankerman-PIC" or "Tankerman-PIC (Barge)" endorsement. The letter from the Coast Guard approving the course will state the number and kind of transfers the course replaces.
- (d) The course in liquid cargo required for an endorsement as—
- (1) "Tankerman-PIC DL" is Tankship: Dangerous Liquids;
- (2) "Tankerman-PIC (Barge) DL" is Tank Barge: Dangerous Liquids;
- (3) "Tankerman-PIC LG" is Tankship: Liquefied Gases; and
- (4) ''Tankerman-PIC (Barge) LG'' is Tank Barge: Liquefied Gases.
- (e) The course in firefighting required for an endorsement as—
- (1) "Tankerman-PIC (Barge)" is Tank Barge: Firefighting; and
- (2) "Tankerman-PIC", "Tankerman-Assistant", and "Tankerman-Engineer" is a firefighting course that meets the basic firefighting section of the IMO's Resolution A.437 (XI), "Training of Crews in Fire Fighting".
- (f) No school may issue a certificate unless the student has successfully completed an approved course with the appropriate curriculum outlined in Table 13.121(f).
- (g) An organization with a course in DL or LG or a course in tank-barge firefighting taught before March 31, 1996, that substantially covered the material required by Table 13.121(f) for liquid cargoes and by Table 13.121(g) for firefighting may seek approval under §10.302 of this chapter from the Coast

Guard for any course taught up to ten years before March 31, 1996.

TABLE 13.121(F)

Course topics	1	2	3	4
General characteristics, compatibility, reaction, firefighting				
procedures, and safety precautions for the cargoes of: Bulk liquids defined as Dangerous Liquids in 46 CFR	x	x		
Part 13. Bulk liquefied gases & their vapors defined as Lique-			x	x
fied Gases in 46 CFR Part 13. Physical phenomena of liquefied gas, including:				
Basic concept			x	×
Compression & expansion			x	X X
Potential hazards of liquefied gas, including:			×	×
Chemical & physical properties			x	x
Combustion characteristics			×	X X
Health hazards (skin contact, inhalation, & ingestion)			x	x
Control of flammability range with inert gas			x	x
Thermal stress in structure & piping of vessel			×	×
Principles of containment systems	x	x	x	x
Construction, materials, coatings, & insulation of cargo	x	x	x	х
tanks. General arrangement of cargo tanks	×	×	×	×
Venting & vapor-control systems	x	x	x	x
Cargo-handling systems, including: Piping systems, valves, pumps, & expansion systems	×	x	×	×
Operating characteristics	x	x	x	x
Instrumentation systems, including:	i			
Cargo-level indicators		X	X	X
Temperature-monitoring systems, cargo		x	x	x
Temperature-monitoring systems, hull	x	x	x	x
Automatic-shutdown systems	×	x	×	×
Ventilation, inerting	x	×	x	x
Valves, including:				
Quick-closing	X X	X X	×	X X
Pneumatic	x	x	x	x
Excess-flow	X	x	X	x
Safety-relief Pressure-vacuum	×	x x	X X	X
Heating-systems: cofferdams & ballast tanks			x	x
Operations connected with loading & discharging of cargo, including:				
Lining up of cargo system and vapor-control system	×	×	×	×
Pre-transfer inspections	х	x	x	x
Pre-transfer conference and completion of the Declaration of Inspection.	×	X	×	X
Hooking up of cargo hose, loading arms, and ground- ing-strap.	×	x	×	X
Starting of liquid flow		×	x	x
Calculation of loading rates		X	X	X
Discussion of loading		x	x	x
Ballasting & deballasting	x	x	x	x
Topping off of cargo tanks		x	X	X
Discussion of discharging Stripping of cargo tanks		x x	×	X
Monitoring of transfers	x	x	x	x
Gauging of cargo tanks	x	x	x	x
Disconnecting of cargo hoses or loading arms	×	x	×	X
Inerting of cargo tanks & void spaces	x	x	x	x
Cooldown & warmup of cargo tanks			x	x
Gas-freeing Loaded or ballasted voyages		X X	×	X X
Testing of cargo-tank atmospheres for oxygen & cargo		x	x	x
vapor.				
Load plan, stability, & stress connected with: Loading of cargo	×	×	×	×

TABLE 13.121(F)—Continued

TABLE 13.17	21(F)—Contin	uea		
Course topics	1	2	3	4
Discharging of cargo	x	х	x	x
Ballasting & deballasting	x	^	x	^
Loadline, draft, & trim	x	x	x	x
Disposal of boil-off, including:				
System design			x	х
Safety features			X	X
Stability-letter requirements	X	X	X	X
Rules (for tank barge & tankship, both international & Federal) pertaining to operational procedures & pollution pre-	^	^	^	^
vention.				
Pollution prevention, including:				
Procedures to prevent air & water pollution	x	x	x	x
Measures to take in event of spillage	х	x	x	х
Danger from drift of vapor cloud	х	x	x	х
Emergency procedures for the following, including notice to				
appropriate authorities: Fire	×	x	x	x
Collision	x	x	x	x
Grounding	x	x x	l x	x
Equipment failure	x	x	x	x
Leaks & spills	x	x	x	х
Structural failure	х	x	x	x
Emergency discharge of cargo	x	x	x	х
Entering of cargo tanks	X	X	X	X
Emergency systems for closing cargo tanks	×	X X	X	×
Emergency systems for closing cargo tanks	^	^	^	^
Dangers of skin contact	l x	×	l	
Inhalation of vapors	x	×		
Electricity & static electricity: hazards & precautions	х	x		
Terminology of tankships for oil & chemicals	х			
Terminology of tank barges for oil & chemicals	x	x		
Terminology of tankships for liquefied gases			X	
Terminology of tank barges for liquefied gases Principles & procedures of Crude-Oil-Washing (COW) sys-			X	
tems, including:				
Purpose	×	×		
Equipment & design	x	x		
Operations	х	x		
Safety precautions	x	x		
Maintenance of plant & equipment	х	x		
Principles & procedures of Inert-Gas Systems (IGS), includ-				
ing:				
Purpose Equipment & design	×	X X	X X	
Operations	x	x	x	
Safety precautions	x	x	x	
Maintenance of plant & equipment	х	x	x	
Cargo-tank cleaning: procuredures & precautions.	x	x		
Principles & procedures of vapor-control recovery systems,				
including:				
Purpose	X	X	X	X
Principles Components	X	X X	X X	×
Hazards	x	x	x	x
Coast Guard regulations	x	x	x	x
Operating procedures, including:				
Testing & inspection requirements	x	x	x	х
Pre-transfer procedures		x	x	х
Connecting sequence		x	x	х
Start-up procedures		X	X	X
Normal operations Emergency procedures, including notice of release	×	X X	X X	X
Information systems on hazards of cargo	x	x	x	X
Safe entry into confined spaces, including:	"	 ^	ļ ^	ļ ^
Definitions & hazards of confined spaces	x	×	×	x
Evaluation & assessment of risks & hazards		x	x	x
Safety precautions & procedures	x	x	x	x
Personal protective equipment (PPE)		x	x	x
Maintenance of PPE		X	X	X
Emergency proceduresFederal regulations, national standards, & industry	×	x x	x x	X X
quidelines.	^	^	^	^
gardoni 166.	•	'		'

TABLE 13.121(F)—Continued

	1	I	I	
Course topics	1	2	3	4
Inspections by marine chemists & competent persons, including hot-work permits & procedures. Vessel Response Plans:	х	х	х	x
Purpose, content, & location of information	х	x	x	х
Procedures for notice & mitigation of spills	x	x	x	x
Geographic-specific appendices	х	x	x	x
Vessel-specific appendices	х	x	x	x
Emergency-action checklist	x	x	x	x

(1) Tankerman-PIC DL. (2) Tankerman-PIC (Barge) DL. (3) Tankerman-PIC LG. (4) Tankerman-PIC (Barge) LG.

TABLE 13.121(g)

Course topics	1	2
Course topics	'	
ments_of fire (Fire triangle):		
Fuel	X	X
Source of ignition	X	X
Oxygen	X	X
Ignition sources (general):		
Chemical		X
Biological		X
Physical		X
Ignition sources applicable to barges	X	
Definitions of flammability and combustibility:		
Flammability		X
Ignition point	X	X
Burning temperature	X	X
Burning speed		X
Thermal value		X
Lower flammable limit	X	X
Upper flammable limit	X	X
Flammable range	X	X
Inerting	X	X
Static electricity	X	X
Flash point	X	X
Auto-ignition	X	X
Spread of fire:		
By radiation	X	X
By convection	X	X
By conduction	X	X
Reactivity	X	X
Fire classifications and applicable extinguishing agents	X	X
Oil leakage	X	X
Smoking	X	X
Overheating pumps	X	X
Galley appliances		X
Spontaneous ignition	X	X
Hot work	X	X
Electrical apparatus		X
Reaction, self-heating, and auto-ignition		X
Fire prevention:		
General	X	X
Fire hazards of DL and LG	X	
Fire detection:		
Fire- and smoke-detection systems		X
Automatic fire alarms		X
Firefighting equipment:		
Fire mains, hydrants		X
International shore-connection		X
Smothering-installations, carbon dioxide (CO ₂), foam		X
Halogenated hydrocarbons		X
Pressure-water spray system in special-category spaces		X
Automatic sprinkler system		X
Emergency fire pump, emergency generator		X
Chemical-powder applicants		X
General outline of required and mobile apparatus		X
Fireman's outfit, personal equipment		X

TABLE 13.121(g)—Continued

TABLE 13.121(g)—Continued		
Course topics	1	2
Resuscitation apparatus		X
Smoke helmet or mask		X
Fireproof life-line and harness		X
Fire hose, nozzles, connections, and fire axes		X
Fire blankets		X
Portable fire extinguishers	X	X
Limitations of portable and semiportable extinguishers	X	
Emergency procedures: Arrangements:		
Escape routes	l x	X
Means of gas-freeing tanks	l â	l ŝ
Class A, B, and C divisions		l â
Inert-gas system		l \hat{x}
Ship firefighting organization:		
General alarms	l	l x
Fire-control plans, muster stations, and duties		l x
Communications		X
Periodic shipboard drills		X
Patrol system		X
Basic firefighting techniques:		
Sounding alarm	X	X
Locating and isolating fires	X	X
Stopping leakage of cargo	X	
Jettisoning		X
Inhibiting		X
Cooling		X
Smothering		X
Sizing up situation	X	
Locating information on cargo	X	
Extinguishing Extinguishing with portable units	X	×
Setting reflash watch	l â	X
Using additional personnel	l x	
Firefighting extinguishing-agents:	_ ^	
Water (solid jet, spray, fog, and flooding)	l	X
Foam (high, medium and low expansion)		l x
Carbon dioxide (CO ₂)	X	X
Halon		X
Aqueous-film-forming foam (AFFF)		X
Dry chemicals	X	X
Use of extinguisher on:		
Flammable and combustible liquids	X	
Manifold-flange fire	X	
Drip-pan fire	X	
Pump fire	X	
Drills for typical fires on barges	X	
Field exercises:		
Extinguish small fires using portable extinguishers:		.,
Electrical	X	X
Manifold-flange	X	X
Drip-pan Pump	X	X
Use self-contained breathing apparatus	1	X X
Extinguish extensive fires with water		X
Extinguish fires with foam, or chemical		X
Fight fire in smoke-filled enclosed space wearing SCBA		X
Extinguish fire with water fog in an enclosed space with heavy smoke		l â
Extinguish oil fire with fog applicator and spray nozzles, dry-chemical, or foam applicators		l \hat{x}
Effect a rescue in a smoke-filled space while wearing breathing apparatus		l â
Effect a resource in a stricke-filled space write wearing preating apparatus		_ ^

§13.123 Recency of service or experience for original tankerman endorsement.

An applicant for an original tankerman endorsement in subpart B,

C, D, or E of this part shall have obtained at least 25% of the qualifying service and, if the endorsement requires transfers, at least two of the qualifying transfers, within five years of the date of application.

⁽¹⁾ Course in tank-barge firefighting.
(2) From the basic firefighting section of the IMO's Resolution A.437 (XI), "Training of Crews in Fire Fighting".

§13.125 Physical requirements.

Each applicant for an original tankerman endorsement shall meet the physical requirements of §10.205(d) of this chapter, excluding paragraph (d)(2) of that section.

§ 13.127 Service requirements: General.

- (a) A service letter must specify—
- (1) The classification of cargo (DL, LG, or, for a restricted endorsement, a specific product) handled while the applicant accumulated the service;
- (2) The dates, the number and kinds of transfers the applicant has participated in, and the number of transfers that involved commencement or completion; and
- (3) That the applicant has demonstrated to the satisfaction of the signer that he or she is fully capable of supervising transfers of liquid cargo, including
 - (i) Pre-transfer inspection;
- (ii) Pre-transfer conference and execution of the Declaration of Inspection;
- (iii) Connection of cargo hoses or loading-arms;
- (iv) Line-up of the cargo system for loading and discharge;

 (v) Start of liquid flow during load-
- (v) Start of liquid flow during loading;
- (vi) Start of cargo pump and increase of pressure to normal discharge pressure;
 - (vii) Calculation of loading-rates;
 - (viii) Monitoring;
- (ix) Topping-off of cargo tanks during loading;
 - (x) Stripping of cargo tanks;
- (xi) Ballasting and deballasting, if appropriate;
- (xii) Disconnection of the cargo hoses or loading-arms; and
 - (xiii) Securing of cargo systems.
- (b) In determining the numbers and kinds of transfers that the applicant has participated in under paragraph (a)(2) of this section, the following rules apply:
- (1) A transfer must involve the loading or discharge from at least one of the vessel's cargo tanks to or from a shore facility or another vessel. A shift of cargo from one tank to another tank is not a transfer for this purpose.

- (2) Regardless of how long the transfer lasts beyond four hours, it counts as only one transfer.
- (3) A transfer must include both a commencement and a completion.
- (4) Regardless of how many tanks or products are being loaded or discharged at the same time, a person may receive credit for only one transfer, one loading, and one discharge a watch.
- (5) Credit for a transfer during a watch of less than four hours accrues only if the watch includes either the connection and the commencement of transfer or the completion of transfer and the disconnection.
- (6) Credit for a commencement of loading accrues only if the applicant participates in the pre-transfer inspection, the pre-transfer conference including execution of the Declaration of Inspection, the connection of cargo hoses or loading-arms, the line-up of the cargo system for the loading, the start of liquid flow, and the calculation of loading-rates.
- (7) Credit for a commencement of discharge accrues only if the applicant participates in the pre-transfer inspection, the pre-transfer conference including execution of the Declaration of Inspection, the connection of cargo hoses or loading-arms, the line-up of the cargo system for the discharge, the start of the cargo pump or pumps and increase of pressure to normal pressure for discharge, and the monitoring of discharge rates.
- (8) Credit for a completion of transfer, whether loading or discharge, accrues only if the applicant participates in the topping-off at the loading port, or in the stripping of cargo tanks and the commencement of ballasting, if required by the vessel's transfer procedures, at the discharge port.

§13.129 Quick-reference table for tankerman.

Table 13.129 provides a guide to the requirements for various tankerman endorsements. Provisions in the reference sections are controlling.

ABLE 13.129

			2	2				
Category	Minimum age	Physical required	Service	Recency of service	Proof of service	Firefighting cer- tificate	Course	English lan- guage
Tankerman PIC Subpart B.	18: 13.201(a)	Yes: 13.125	Yes: 13.203, 30 days licensed or 60 days unli- censed and 10 cardo transfers.	Yes: 13.123, 25% of service, 2 transfers within 5 vrs.	Yes: 13.205, Letter.	Yes: 13.207, Basic F/F*.	Yes: 13.209, DL or LG.	Yes: 13.201(g).
Tankerman PIC (Barge) Sub- part C.	18: 13.301(a)	Yes: 13.125	Yes: 13.303, 60 days on T/Vs or 6 months on T/Bs and 10 cardo transfers.	Yes: 13.123, 25% of service, 2 transfers within 5	Yes: 13.305, Letter.	Yes: 13.307, Basic F/F* or Tank-barge F/F.	Yes: 13.309, DL or LG.	Yes: 13.301(g).
Tankerman As- sistant Subpart D.	18: 13.401(a)	Yes: 13.125	Yes: 13.403, 90 days on tank- ships or attend a cargo course.	Yes: 13.123, 25% of service, within 5 yrs.	Yes: 13.405, Letter.	Yes: 13.407, Basic F/F*.	Yes: 13.409, Cargo course or 90 days service.	Yes: 13.401(f).
Tankerman Engi- neer Subpart E.	18: 13.501(a)	Yes: 13.125	Yes: 13.503, 90 days licensed or 30 days licensed or 30 days licensed and completion of a DL or LG course or 60 days unlicensed and completion of a DL or LG course.	Yes: 13, 123, 25% of service, within 5 yrs.	Yes: 13.505, Letter.	Yes: 13.507, Basic F/F*.	Yes: 13.509, Cargo course or service re- quirements.	Yes: 13.501(g).
Restricted Tankerman PIC.	18: 13.111(b)	Yes: 13.111(b)	Yes: 13.111(b), 30 days li- censed or 60 days unli- censed and 10 cargo transfers.	Yes: 13.111(b), 25% of service, 2 transfers within 5 yrs.	Yes: 3.111(b), Letter.	Yes: 13.111(b), Basic F/F*.	 0 V	Yes: 13.111(b).
Restricted Tankerman PIC (Barge).	18: 13.111(c)	Yes: 13.111(c)	Yes: 13.111(c), 60 days on T/ Vs or 6 months on T/Bs and 10 cargo transfers.	Yes: 13.111(c), 25% of service, 2 transfers within 5 yrs.	Yes: 13.111(c), Letter.	Yes: 13.111(c), Basic F/F* or Tank-barge F/F.	ON	Yes: 13.111(c).

_		
No		
No		
Yes:	13.11(d), Letter.	Fire Fighting".
No		aining of Crews in
Yes:	13.111(d)(4), "Competent Person" and knowledge of tank-cleaning, gas-freeing.	tion A.437 (XI), "Tra
18: 13.111(d) Yes: 13.111(d) Yes:		*From the basic firefighting section of the IMO's Resolution A.437 (XI), "Training of Crews in Fire Fighting"
18: 13.111(d)		firefighting section
Restricted	Tankerman PIC (Barge) facility.	*From the basic

§ 13.201

Subpart B—Requirements for "Tankerman-PIC" Endorsement

§13.201 Original application for "Tankerman-PIC" endorsement.

Each applicant for an original "Tankerman-PIC" endorsement shall—

- (a) Be at least 18 years old;
- (b) Apply on a Coast Guard form;
- (c) Present evidence of passing a physical examination in accordance with §13.125;
- (d) Present evidence of service on tankships in accordance with §13.203;
- (e) Meet the requirement of a course on firefighting in §13.207;
- (f) Meet the requirement of a course in DL or LG appropriate for the endorsement applied for in §13.209; and
- (g) Be capable of speaking and understanding, in English, all instructions needed to commence, conduct, and complete a transfer of cargo, and be capable of reading the English found in the Declaration of Inspection, vessel response plans, and Cargo Information Cards.

§13.203 Eligibility requirements: Experience.

Each applicant for a "Tankerman-PIC" endorsement for DL or LG shall meet the requirements of either paragraphs (a) and (b) or paragraph (c) of this section.

- (a) Each applicant shall present evidence of— $\,$
- (1) At least 30 days of service as a licensed deck officer or a licensed engineering officer on one or more tankships certified to carry DL or LG appropriate to the endorsement applied for;
- (2) At least 60 days of unlicensed service on deck or in the engine department on one or more tankships certified to carry DL or LG appropriate to the endorsement applied for; or
- (3) A mixture of licensed and unlicensed service on deck or in the engine department on tankships certified to carry DL or LG appropriate to the endorsement applied for equivalent to 30 days of licensed service, every 2 days of unlicensed service counting as 1 day of licensed service.
- (b) Each applicant shall present evidence of participation, under the supervision of a "Tankerman-PIC," in at

least ten transfers of liquid cargo in bulk of the classification desired on tankships, including at least—

- (1) Five loadings and five discharges;
- (2) Two commencements of loading and two completions of loading; and
- (3) Two commencements of discharge and two completions of discharge.
- (c) Each applicant already holding an MMD endorsed "Tankerman-PIC" for DL and seeking an endorsement for LG, or the converse, shall—
- (1) Provide evidence of at least half the service required by paragraph (a) of this section; and
- (2) Comply with paragraph (b) of this section, except that he or she need provide evidence of only three loadings and three discharges along with evidence of compliance with paragraphs (b)(2) and (3) of this section.

§13.205 Proof of service for "Tankerman-PIC" endorsement.

Service must be proved by a letter on company letterhead from the owner, operator, or master of the vessel on which the applicant obtained the service. The letter must contain the information described in §13.127(a).

§13.207 Eligibility requirements: Firefighting course.

Each applicant for an original "Tankerman-PIC" endorsement shall present a certificate of successful completion from a course in shipboard firefighting, approved by the Commandant and meeting the basic firefighting section of the IMO's Resolution A.437 (XI), "Training of Crews in Fire Fighting", completed within five years of the date of application for the endorsement, unless he or she has previously submitted such a certificate for a license or a tankerman endorsement.

§ 13.209 Eligibility requirements: Cargo course.

Each applicant for an original "Tankerman-PIC" endorsement shall present a certificate of completion from a course in DL or LG, appropriate for tankships, approved by the Commandant, appropriate to the endorsement applied for, within two years of the date of application.

Subpart C—Requirements for "Tankerman-PIC (Barge)" Endorsement

§13.301 Original application for "Tankerman-PIC (Barge)" endorsement.

Each applicant for a "Tankerman-PIC (Barge)" endorsement shall—

- (a) Be at least 18 years old;
- (b) Apply on a Coast Guard form;
- (c) Present evidence of passing a physical examination in accordance with §13.125;
- (d) Present evidence of service on tank vessels in accordance with §13.303;
- (e) Meet the requirement of a fire-fighting course in §13.307;
- (f) Meet the requirement of a course in DL or LG appropriate for the endorsement applied for in §13.309; and
- (g) Be capable of speaking, and understanding, in English, all instructions needed to commence, conduct, and complete a transfer of cargo, and be capable of reading the English found in the Declaration of Inspection, vessel response plans, and Cargo Information Cards.

§13.303 Eligibility requirements: Experience.

Each applicant for a "Tankerman-PIC (Barge)" endorsement for DL or LG shall meet the requirements of either paragraphs (a) and (b) or paragraph (c) of this section.

- (a) Each applicant shall present evidence of—
- (1) At least 60 days of service on one or more tank vessels certified to carry DL or LG appropriate to the endorsement applied for; or
- (2) At least 6 months of closely related service directly involved with tank barges appropriate to the endorsement applied for; and
- (b) Participation, under the supervision of a "Tankerman-PIC" or "Tankerman-PIC (Barge)," in at least ten transfers of liquid cargo in bulk of the classification desired on tankships or tank barges, including at least—
 - (1) Five loadings and five discharges;(2) Two commencements of loading
- and two completions of loading; and
- (3) Two commencements of discharge and two completions of discharge.

- (c) Each applicant already holding an MMD endorsed "Tankerman-PIC (Barge)" for DL and seeking an endorsement for LG, or the converse, shall—
- (1) Provide evidence of at least half the service required by paragraph (a) of this section; and
- (2) Comply with paragraph (b) of this section, except that he or she need provide evidence of only three loadings and three discharges along with evidence of compliance with paragraphs (b)(2) and (3) of this section.

§13.305 Proof of service for "Tankerman-PIC (Barge)" endorsement.

Service must be proved by a letter on company letterhead from a terminal owner or operator; a tank barge owner or operator; or the owner, operator, or master of a tankship. The letter must contain the information required by §13.127(a), excluding paragraph (a)(3)(vii).

§13.307 Eligibility requirements: Firefighting course.

Each applicant for a "Tankerman-PIC (Barge)" endorsement shall present a certificate of successful completion from—

- (a) A course in shipboard firefighting, approved by the Commandant and meeting the basic firefighting section of the IMO's Resolution A.437 (XI), "Training of Crews in Fire Fighting", completed within five years of the date of application for the endorsement, unless he or she has previously submitted such a certificate for a license or a tankerman endorsement;
- (b) A course in tank-barge firefighting, approved by the Commandant and meeting §13.121, completed within five years of the date of application for the endorsement.

§ 13.309 Eligibility requirements: Cargo course.

Each applicant for an original "Tankerman-PIC (Barge)" endorsement shall present a certificate of completion from a course in DL or LG approved by the Commandant, appropriate to the endorsement applied for, within two years of the date of application.

§ 13.401

Subpart D—Requirements for "Tankerman-Assistant" Endorsement

§ 13.401 Original application for "Tankerman-Assistant" endorsement.

Each applicant for a "Tankerman-Assistant" endorsement shall—

- (a) Be at least 18 years old;
- (b) Apply on a Coast Guard form;
- (c) Present evidence of passing a physical examination in accordance with §13.125;
- (d) Meet the requirement of a fire-fighting course in §13.407;
- (e) (I) Meet the requirement of a course in DL or LG appropriate for the endorsement applied for in §13.409; or
- (2) Present evidence of service on tankships in accordance with §13.403; and
- (f) Be capable of speaking and understanding, in English, all instructions needed to commence, conduct, and complete a transfer of cargo.

§13.403 Eligibility requirements: Experience.

- (a) Each applicant for a "Tankerman-Assistant" endorsement shall present—
- (1) Evidence of at least 90 days of deck service on tankships certified to carry DL or LG appropriate to the endorsement applied for; or
- (2) A certificate of completion from a course in DL or LG appropriate for the endorsement applied for as prescribed in §13.409.
- (b) Each applicant already holding an MMD endorsed "Tankerman-Assistant" for DL and seeking one for LG, or the converse, shall—
- (1) Provide evidence of at least half the service required in paragraph (a)(1) of this section; or
- (2) Meet the requirement of a course in DL or LG appropriate for the endorsement applied for as prescribed in §13.409.

§13.405 Proof of service for "Tankerman-Assistant" endorsement.

(a) Service must be proved by a letter on company letterhead from the owner, operator, or master of a tankship. The letter must specify—

- (1) The classification of cargo (DL or LG) carried while the applicant accumulated the service;
- (2) The number of days of deck service the applicant accumulated on the tankship; and
- (3) That the applicant has demonstrated an understanding of cargo transfer and a sense of responsibility that, in the opinion of the signer, will allow the applicant to safely carry out duties respecting cargo transfer and transfer equipment assigned by the PIC of the transfer without direct supervision by the PIC; or
 - (b) Service must be proved by-
- (1) Certificates of Discharge from tankships with the appropriate classification of cargo (DL, LG, or both); and
- (2) A letter on company letterhead from the owner, operator, or master of one of the tankships stating that he or she has demonstrated—
- (i) An understanding of cargo transfer; and
- (ii) A sense of responsibility that, in the opinion of the signer, will allow him or her to safely carry out duties respecting cargo and its equipment assigned by the PIC of the transfer without direct supervision by the PIC.

§13.407 Eligibility requirements: Firefighting course.

Each applicant for a "Tankerman-Assistant" endorsement shall present a certificate of successful completion from a course in shipboard firefighting, approved by the Commandant and meeting the basic firefighting section of the IMO's Resolution A.437 (XI), "Training of Crews in Fire Fighting", completed within five years of the date of application for the endorsement, unless he or she has previously submitted such a certificate from one of these courses for a license or endorsement.

§ 13.409 Eligibility requirements: Cargo course.

Each applicant for an original "Tankerman-Assistant" endorsement that has not presented the required service on tankships must present a certificate of completion from a course in DL or LG, appropriate for tankships, approved by the Commandant, appropriate to the endorsement applied for,

within two years of the date of application.

Subpart E—Requirements for "Tankerman-Engineer" Endorsement

§13.501 Original application for "Tankerman-Engineer" endorsement.

Each applicant for a "Tankerman-Engineer" endorsement shall—

- (a) Be at least 18 years old;
- (b) Apply on a Coast Guard form;
- (c) Present evidence of passing a physical examination in accordance with §13.125;
- (d) Present evidence of service on tankships in accordance with §13.503;
- (e) Meet the requirement of a fire-fighting course in §13.507;
- (f) Meet the requirement of a course in DL or LG appropriate for the endorsement applied for in §13.509; and
- (g) Be capable of speaking and understanding, in English, all instructions needed to commence, conduct, and complete a transfer of cargo.

§13.503 Eligibility requirements: Experience.

- (a) Each applicant for a ''Tankerman-Engineer'' endorsement shall present evidence of at least—
- (1) 90 days of service as a licensed engineering officer on tankships certified to carry DL or LG appropriate to the endorsement applied for;
- (2) 30 days of service as a licensed engineering officer on tankships certified to carry DL or LG appropriate to the endorsement applied for, and a certificate of completion from a course in DL or LG appropriate for the endorsement applied for as prescribed by §13.509(a); or
- (3) 60 days of unlicensed service in the engine department on tankships certified to carry DL or LG appropriate to the endorsement applied for, and a certificate of completion from a course in DL or LG appropriate for the endorsement applied for as prescribed by §13.509(a).
- (b) Each applicant already holding an MMD endorsed "Tankerman-Engineer" for DL and seeking one for LG, or the

converse, shall provide evidence of at least half the service required by—

- (1) Paragraph (a)(1) of this section; or
- (2) Paragraph (a)(2) or (3) of this section, and a certificate of completion from a course in DL or LG appropriate for the endorsement applied for as prescribed by §13.509(a).

§13.505 Proof of service for "Tankerman-Engineer" endorsement.

- (a) Service must be proved by a letter on company letterhead from the owner, operator, or master or chief engineer of a tankship. The letter must specify—
- (1) The classification of cargo (DL, LG, or both) carried while the applicant accumulated the service; and
- (2) The number of days of licensed and unlicensed service in the engine department on tankships; or
- (b) Service must be proved by certificates of discharge from tankships with the appropriate classification of cargo (DL, LG, or both).

§13.507 Eligibility requirements: Firefighting course.

Each applicant for a "Tankerman-Engineer" endorsement shall present a certificate of successful completion from a course in shipboard firefighting, approved by the Commandant and meeting the basic firefighting section of the IMO's Resolution A.437 (XI), "Training of Crews in Fire Fighting", completed within five years of the date of application for the endorsement, unless he or she has previously submitted such a certificate for a license or tankerman endorsement.

§ 13.509 Eligibility requirements: Cargo course.

Each applicant for an original "Tankerman-Engineer" endorsement that has not presented service prescribed by §13.503(a)(1) must present a certificate of completion from a course in DL or LG, appropriate for tankships, approved by the Commandant, appropriate to the endorsement applied for, within two years of the date of application.

§ 14.01-1

PART 14—SHIPMENT AND DISCHARGE OF SEAMEN

Subpart 14.01—General

Sec.

14.01-1 Purpose of part.

14.01-3 Coast Guard address.

14.01-5 Foreign or intercoastal voyages upon which shipping articles are required.

14.01-7 Voyages upon which shipping articles are not required.

Subpart 14.05—Shipping Articles

14.05-1 Form of shipping articles.

14.05-2 Posting copy of shipping articles.

14.05-3 Preparation of shipping articles.

14.05–5 Production of documents by seamen signing shipping articles.

14.05-7 Paying off seamen during foreign or intercoastal voyage.

14.05–10 Reporting shipment and discharge of seamen.

14.05–15 Completing entries in shipping articles at completion of voyage.

Subpart 14.10—Discharging Seamen

14.10–1 Entries in continuous discharge book.

14.10-5 Entries in certificates of discharge to merchant seamen.

14.10-7 Issuance of certificate of character upon discharge of seaman.

14.10-10 Discharging a seaman in a foreign port.

14.10–15 Certificate of discharge issued pending issuance of duplicate continuous discharge book.

14.10-20 Discharge of seamen in special cases.

Subpart 14.15—Disclosure of Information Regarding Shipments and Discharges of Merchant Mariners

 $14.15\hbox{--}1$ Availability of information to the public.

Subpart 14.20—Special Provisions for Oceanographic Research Vessels

14.20-1 General.

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14.20-10 Exemptions.

14.20-15 Reports required.

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Source: $44\ FR\ 70155$, Dec. 6, 1979, unless otherwise noted.

Subpart 14.01—General

§14.01-1 Purpose of part.

This part prescribes rules for the shipment and discharge of seamen on certain United States vessels.

§14.01-3 Coast Guard address.

Each form or report required in this part to be submitted to the Commandant shall be forwarded to: Director. National Maritime Center (NMC).

[44 FR 70155, Dec. 6, 1979, as amended by CGD 95–072, 60 FR 50460, Sept. 29, 1995]

§14.01-5 Foreign or intercoastal voyages upon which shipping articles are required.

(a) Prior to proceeding on any foreign or intercoastal voyage listed in this section, or the engagement of replacement or additional seamen for such a voyage, the master shall make an agreement (shipping articles) in writing with each seaman. The articles shall be signed by the master and each seaman so engaged.

(b) Except as provided in §14.01-7, shipping articles are required for the following voyages and vessels:

(1) A voyage by a United States vessel from a port in the United States to any foreign port other than ports in the following areas:

(i) British North American possessions.

(ii) West India Islands.

(iii) Republic of Mexico.

(2) A voyage by a United States vessel of 75 gross tons or upward between a United States port on the Atlantic and a United States port on the Pacific, or vice versa.

NOTE: The provisions of R.S. 4520 (46 U.S.C. 574), require the master of any United States vessel of 50 gross tons or upward, bound from a port in one state to a port in any other than an adjoining state, to make an agreement (shipping articles) with every seaman engaged

§14.01-7 Voyages upon which shipping articles are not required.

(a) Shipping articles are not required but may be utilized for the following classes of vessels:

(1) Vessels engaged exclusively in fishing or whaling.

(2) Yachts.

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